Rafts, Boats, and Cruise Ships

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INTRODUCTION

During the past few decades, a radical shift has occurred in how philosophers conceive of the relation between science and philosophy. A great number of analytic philosophers have adopted what is commonly called a naturalistic approach, arguing that their inquiries ought to be in some sense continuous with science. Where early analytic philosophers often relied on a sharp distinction between science and philosophy—the former an empirical discipline concerned with fact, the latter an a priori discipline concerned with meaning—philosophers today largely follow Willard Van Orman Quine (1908-2000) in his seminal rejection of this distinction as well as in his reconstruction of their discipline in naturalistic terms, thereby propagating a thorough, scientifically informed, philosophy.

This book offers a historical study of Quine's naturalism. It provides a detailed reconstruction of Quine's development, a novel interpretation of his arguments, and a systematic investigation into the presuppositions underlying his position. As such this dissertation aims to contribute to the rapidly developing historiography of analytic philosophy as well as to a better, historically informed, understanding of what is philosophically at stake in the contemporary naturalistic turn.

1.1 HISTORICAL BACKGROUND

Naturalism, broadly defined as the idea that philosophical inquiry ought to be science-minded in both theory and method, has a rich history. Although it is probably for the first time that so many philosophers identify themselves as naturalists, it

would be a mistake to think of the position itself as new; naturalistic pictures of inquiry, at least in some varieties, are almost as old as science itself.

Naturalistic world views gained prominence especially in the second half of the nineteenth century. In the wake of Darwin and Wallace's work on evolution, the early development of psychology as an independent discipline, and the steady advances in mathematics, physics, and chemistry, the prospects for an exclusively naturalistic perspective on reality became a frequently debated subject among philosophers and scientists. In these often heated discussions, naturalists argued for scientific explanations of supposedly supernatural phenomena, i.e. for a picture of reality in which man, mind, and morality are conceived as part of the natural order.[1]

Across the Atlantic, naturalism came to full bloom from the early 1920s onwards, when a group of pragmatist philosophers, among whom John Dewey, Roy Wood Sellars, George Santayana, and somewhat later, Ernest Nagel, came to develop views they identified as naturalistic.[2] Most of them defended a two-sided naturalism; they argued for the *metaphysical* claim that reality is exhausted by nature as it is studied by the sciences, thus dismissing appeals to supernatural explanation; and they defended the *methodological* claim that scientific method is the only reliable route to knowledge, thereby suggesting that philosophers ought to adopt this method.[3]

1 See Spencer (1862), Lewes (1874), Huxley (1892) and Haeckel (1899). Broadly naturalistic philosophies were also developed by materialists, empiricists, and, to a certain extent, positivists. See Büchner (1855), Mill (1865), and Comte (1830-1842). For some influential anti-naturalist responses from theistic, idealistic, and analytic philosophers, see Balfour (1895), Ward (1896), and Moore (1903).

2 See Sellars (1922), Santayana (1923), Dewey (1925), and Nagel (1954, 1961), as well as the essays collected in Krikorian (1944) and Ryder (1994). For a history of naturalism in the United States before the 1920s, see Larrabee (1944).

3 See Sellars (1924), Randall (1944), and, for a historical discussion, Kim (2003). Today, it is still quite common to distinguish between metaphysical and

Probably the most influential naturalist of this group was John Dewey, the pragmatist who denied there is any distinctively philosophical perspective on reality. Dewey, himself building on the fallibilism and anti-foundationalism of his predecessors Peirce and James, viewed mind as part of the world that is studied by the sciences. For him, the philosopher is someone who "has no private store of knowledge or methods for attaining truth" and must therefore utilize "the best available knowledge of its time and place", such that "its road is the subject-matter of natural existence as science discovers and depicts it" (1925, 408).[4]

During the second half of the twentieth century, naturalistic philosophies rapidly gained support. As a result of this development, naturalism is contemporary philosophy's dominant metaphilosophical ideology.[5] Although it is difficult to isolate the causes of this development, it is safe to say that natural-

methodological varieties of naturalism. See Moser and Yandell (2000, §1), De Caro and Macarthur (2004a, 2-8), and Papineau (2009). Scholars sometimes also distinguish an *epistemological* variant of naturalism which entails that all knowledge is scientific knowledge. See Wagner (1993, 212) and Glock (2003, 27-8).

4 It should be noted that Dewey sometimes defines naturalism in much weaker terms as well. See his (1944, 2) claim that a naturalist is someone "who has respect for the conclusions of natural science". Present-day naturalists too defend a wide range of metaphilosophical positions—some weak, some extremely strong. This wide range of metaphilosophical positions that go under the name 'naturalism' has led many to complain that it is almost impossible to come up with a definition for the view. See van Fraassen (1996, 172), who argues that it is "nigh-impossible" to "identify what naturalism is", but also earlier Seth (1896), Sellars (1927), and Nagel (1954, 3). Maffie (1990) and Haack (1993a), however, have attempted to resolve this situation by offering taxonomies of naturalism.

5 See, for example, Leiter (2004, 3), who speaks about "a naturalistic turn" in philosophy. Leiter's claim is backed up by Bourget and Chalmers' (2014) survey among 931 leading philosophers. In response to the question whether they would describe themselves as naturalists or non-naturalists in metaphilosophy, 49.8% of the respondents answered 'Naturalism', whereas only 25.9% of the respondents chose the non-naturalist option. 24.3% of the res-

ism's contemporary prominence is for a significant part due to the work of Quine, one of the first philosophers to formulate a comprehensive naturalistic worldview that covers almost all major problems in epistemology and metaphysics. Quine's "On What There Is" (1948) has arguably set the agenda for most contemporary metaphysicists, whereas "Epistemology Naturalized" (1969a) paved the way for the in some circles popular reconception of epistemology as 'the science of science'.[6]

Quine is connected to his naturalistic predecessors in that he seems to have borrowed the term 'naturalism' from Dewey. Although Quine, as we shall see, already defended a thoroughly naturalistic philosophy in the 1950s, it is only in his 1968 John Dewey Lectures that he first uses the term 'naturalism' to describe his position; lectures in which he acknowledges Dewey's influence:

> Philosophically I am bound to Dewey by the naturalism that dominated his last three decades. With Dewey I hold that knowledge, mind, and meaning are part of the same world that they have to do with, and that they are to be studied in the same empirical spirit that animates natural science. There is no place for a prior philosophy.[7] (OR, 1968c, 26)

pondents were agnostic, insufficiently familiar with the issue, or thought that the question was too unclear to answer.

6 Reception-studies are rare in philosophy. Still Quine's important role in the naturalistic turn seems to be generally recognized. See Leiter (2004, 2), Hacker (2006, 231), Glock (2003, 23-30), and Macarthur (2008, 2). Other oftenmentioned influences (besides Dewey) are Nagel's (1961) *The Structure of Science* and Kuhn's (1962) *The Structure of Scientific Revolutions*. See Rosenberg (1996) and Kitcher (1992, §4). For Quine's influence on contemporary metaphysics and epistemology, see Putnam (2004, 78-9) and Feldman (2012).

7 The above timeline is confirmed by the fact that Quine's seminal "Epistemology Naturalized" (1969a) was initially titled "Stimulus and Meaning" (SM, 1965) and did not yet contain the term 'naturalism', suggesting that Quine had not yet decided to label his philosophy 'naturalistic' in 1965. A further clue is that the first version of "Ontological Relativity" (prepared in March

Quine's naturalism, as I shall argue in the chapters to come, can best be characterized in terms of an immanence-transcendence distinction. Quine rejects the idea of a transcendental extra-scientific perspective and replaces it with a rigorously science-immanent approach, defining naturalism as "the recognition that it is within science itself, and not in some prior philosophy that reality is to be identified and described" (TTPT, 1981d, 21). For Quine philosophy and science are continuous enterprises: we all start our reasoning within our "inherited world theory as a going concern" and try "to improve, clarify, and understand the system from within" (FME, 1975a, 72).[8]

Despite the fact that Quine borrowed the term 'naturalism' from Dewey, it would be a mistake to view his position as a mere continuation of the latter's ideas. Quine had already defended a naturalistic approach in all but name when he was still

1967 and presented at Chicago and Yale in May 1967, does not yet contain the term 'naturalism' either (nor a reference to Dewey) (OR67*, 1967). Finally, when Quine, before 1967, speaks about 'naturalistic arguments' and 'naturalists' in (LDHP, 1946a, 112) and (MSLT, 1953b, 149) respectively, his use of those terms there is distinct from the metaphilosophical view with which he would identify the term from the late sixties onwards.

8 Because the immanence-transcendence distinction will play such an important role in the chapters to come, let me note in advance that Quine uses the distinction in three distinct senses; two "mundane" (WDWD, 1999b, 164n7) and one "august" (RA, 1994d, 230). In *Philosophy of Logic*, Quine introduces an immanence-transcendence distinction for grammatical categories. A category is immanent when it is defined for a particular language, e.g. the class of *der*-words in German grammar, and transcendent when it is defined for languages generally (PL, 1970c, 19-22). Another 'mundane' use of the immanence-transcendence dichotomy can be found in (IV, 1991a, 242), where Quine distinguishes between metatheories which are and metatheories which are not expressed in the language of the object theory. In describing his ideas about the relation between science and philosophy, however, Quine is not referring to these mundane distinctions as they are "irrelevant to issues of naturalism" (WDWD, 1999b, 164n7). In what follows, therefore, I will limit my examination to Quine's 'august' immanence-transcendence distinction.

largely unfamiliar with Dewey's work,[9] and when he *did* start to study the early pragmatists in the late 1960s, he largely disagreed with their instrumentalist reading of inquiry, i.e. with their picture of science "as a conceptual shorthand for organizing observations". In particular, Quine questioned whether their instrumentalism is consistent with the naturalists' view that we always talk "within our going system when we attribute truth" and "cannot talk otherwise" (PPE, 1975e, 33-4).[10]

Something similar can be said about the naturalistic turn in general. Despite the fact that naturalism has a rich history, ranging from nineteenth-century views about the implications of the theory of evolution to the development of pragmatic naturalism in early twentieth-century American philosophy, it would be a mistake to view the naturalistic revolution in the second half of the twentieth century as a mere continuation of the developments sketched above.

To get a historically more accurate picture of Quine's position as well as the naturalistic turn in general, both should be discussed against the background of developments within the analytic tradition in philosophy. For not only did Quine develop his philosophy largely in response to Russell and Carnap, the naturalistic turn too is generally viewed as a revolution that took place within analytic philosophy.[11]

Since its inception in the late nineteenth century, analytic philosophers have evinced a deep respect for the achievements of

9 With a possible exception of C. I. Lewis, Quine seems to have been little influenced by the early pragmatists in general. See Koskinen and Pihlström (2006), R. Sinclair (2012, 336), and Godfrey-Smith (2014). For Quine's own account of his relation to the early pragmatists, see (PPE, 1975e), (CP, 1990d, 292), (RPR, 1992a, 213), and (TCL, 1994f, 60-1).

10 Quine's critique of the pragmatists on this score is discussed in more detail in section 4.5.

11 See Kitcher (1992), Kim (2003, 84), and Leiter (2004, 1-8). A notable exception is Hacker (2006, 231), who *does* see naturalism as a "pragmatist tradition". This, no doubt, has to do with his unusual definition of analytic philosophy, as shall become clear below.

both the empirical and the formal sciences.[12] Yet during the first half of the twentieth century, most analytic philosophers combined this respect for science with a firm anti-psychologism, i.e. with the idea that facts about psychology are irrelevant to questions of logical truth, justification, and meaning. Analytic philosophers, though generally applauding the developments in experimental psychology, believed that the field was categorically irrelevant to their inquiries into the question as to how we *ought* to reason.[13]

Mostly due to the influence of the early Wittgenstein, analytic philosophy's early anti-psychologism evolved into a general distinction between science and philosophy, the former an empirical discipline concerned with fact, the latter an a priori discipline concerned with meaning.[14] Many logical positivists and ordinary language philosophers eagerly adopted the distinction, dismissing the relevance of science for their inquiries.[15] In fact, the idea that there is a sharp distinction between science and philosophy, was so pervasive among early analytic

12 Some even argue that analytic philosophy can be defined in terms of its respect for science. See Rorty (1982, 220), Wang (1986, 75), and Quinton (1995, 30) as quoted in Glock (2008b, 160).

13 Most famous in this respect is Frege's attack on Mill's (1865, 359) claim that logic is a branch of psychology. Frege held that the "psychological is to be sharply separated from the logical" since logical truths are true regardless of whether we judge them to be true (Frege, 1884, 17). In a similar fashion, the early Moore and Russell attacked idealism for its implicit reliance on psychological notions and developed a metaphysics in which there is "no overt concern at all with the nature of thought or the mind or experience" as these notions were "looked on as psychological, and for this reason of no interest to philosophy" (Hylton, 1990, 108). For a wide-ranging study of the history of the debate on psychologism, see Kusch (1995).

14 See Ricketts (1985), Coffa (1991), and Hacker (1996).

15 For logical positivists the distinction was one between science and the "logic of science" (Carnap, 1934, §72), for ordinary language philosophers the distinction was one between "talk[ing] sense with concepts" and "talk[ing] sense about them" (Ryle, 1949, 7). In what follows, I focus on Carnap's version of the distinction.

philosophers that Hacker (1996) has claimed that this distinction defines the tradition.[16]

It is the background of this widespread distinction between science and philosophy that explains the revolutionary character of the naturalistic turn. And it was Quine, in his seminal "Two Dogmas of Empiricism" (1951b), who contributed most to the decline of this distinction. In arguing against two central dogmas of logical positivism—(1) the idea that we can strictly distinguish between analytic and synthetic statements, and (2) the idea that every synthetic statement can be tested in isolation—Quine undermined the distinction between questions of fact and questions of meaning on which the science-philosophy dichotomy was largely based. Against (1), Quine argued that there is no clear empirically acceptable definition of the analytic-synthetic distinction and against (2), Quine argued that individual statements can only be tested in conjunction with background theory, thereby advocating a thoroughly holistic picture of inquiry.

Although Quine is most famous for his rejection of (1), it is his holistic argument against (2) that is most significant from a historical perspective. After all, Quine's argument against (1) is solely concerned with the impossibility of finding an empirically acceptable explication of the distinction, whereas his argument against (2) shows that even if such a definition were to be found, it would be epistemically useless since a holistic picture of inquiry precisely shows that any analytic truth will be revisable in the light of adverse experience, and hence will be epistemologically indistinguishable from synthetic truths.[17]

16 Indeed, Hacker draws the radical conclusion that Quine's ideas "contributed [...] to the decline of analytic philosophy" (1996, xi) and that "[c]ontemporary philosophers who follow Quine have, in this sense, abandoned analytic philosophy" (1997, 10).

17 This is something Quine himself would later stress as well. See (RGH, 1986d, 207). See also (QSM, 1988, 27): "Once we appreciate holism [...] the notion of analyticity ceases to be vital to epistemology".

Quine's holism, i.e. his idea that individual hypotheses cannot be tested in isolation, is a relatively innocent observation about the logic of theory testing, first proposed by Pierre Duhem.[18] According to Quine, it is simply an empirical fact that we can never test a single hypothesis, a fact firmly supported by scientific practice. Still the idea is controversial, especially in discussions about Quine's philosophy. The reason is that Quine is often read as arguing for an extremely radical version of holism, suggesting that the scope of holism should be extended to "the whole of science" (TDE, 1951b, 41), and that confirmation and meaning are constituted holistically as well, ideas which are widely dismissed by philosophers of science and philosophers of language.[19]

Although, as shall become clear in the chapters to come, the relation between holism and naturalism is more complex than is often presupposed, it is evident that "Two Dogmas", in dismissing the picture of science and philosophy that had dominated analytic philosophy for a large part of its history, has contributed significantly to both Quine's naturalistic development and the naturalistic turn which took place in the following decades. For Quine himself became "more consciously and explicitly naturalistic" in the years immediately following "Two Dogmas" and contemporary naturalists also hail the paper for

18 See Duhem (1914, 187): "the physicist can never subject an isolated hypothesis to experimental test, but only a whole group of hypotheses; when the experiment is in disagreement with his predictions, what he learns is that at least one of the hypotheses constituting this group is unacceptable and ought to be modified; but the experiment does not designate which one should be changed".

19 See Dummett (1973), Fodor and Lepore (1992), Maddy (1992), Sober (1999), and Achinstein (2001). In chapter 5, I discuss several varieties of holism that have been attributed to Quine and argue that once one appreciates the naturalistic views that underlie his holism, his views on the matter turn out to be more straightforward than is often suggested.

its influence on their ideas about the relation between science and philosophy.[20]

1.2 NATURALISM AND HOLISM

The history of the naturalistic turn as sketched above suggests that there is a direct connection between Quine's holism and naturalism. After all, Quine's holistic picture of inquiry played an essential role in defusing the science-philosophy distinction that dominated early analytic philosophy. This connection between holism and naturalism is further substantiated by the essential role they both play in the Neurathian boat metaphor that Quine so often uses to illustrate his ideas.[21] On the one hand, the metaphor illustrates that we cannot test any hypothesis in isolation; that in plugging the leaks in one part of the ship we will always require some other part of the boat as a foothold. On the other hand, the metaphor emphasizes that there cannot be a transcendental extra-scientific perspective, that it is impossible to dock the boat and examine or repair its foundations while firmly standing on the shore.

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20 See Kitcher (1992, §4), Haack (1993a, 171), and Rosenberg (1996, 2). My emphasis on "Two Dogmas" as a strong influence on the contemporary naturalistic turn is of course not to deny the influence of Quine's more explicitly naturalistic work, in particular *Word and Object* (1960b) and "Epistemology Naturalized" (1969a). With respect to the last work mentioned, it is a little noted fact that Quine originally titled his paper "Epistemology naturalized; or, the case for psychologism" (ENP*, 1968a), something which provides further support for the claim that his ideas ought to be viewed in the light of the developments in early analytic philosophy as outlined above.

21 See Neurath (1932, 92): "We are like sailors who have to rebuild their ship on the open sea, without ever being able to dismantle it in dry-dock and reconstruct it from the best components". Quine uses the metaphor in (IOH, 1950a, 79), (OME, 1952a, 223, 225), (PR, 1955, 253), (WO, 1960b, 3, 124, 210), (NK, 1969b, 126-7), and (FME, 1975a, 72). For Quine's relation to Neurath, see Koppelberg (1987, 1990) and (CK, 1990c, 212).

Despite this intrinsic connection between holism and naturalism in Quine's philosophy, however, neither the historical background nor the philosophical ramifications of this relation has been carefully examined in the literature. What is the exact relation between holism and naturalism in Quine's philosophy? How did Quine develop these positions? And what role does holism play in the contemporary naturalistic turn?

This dissertation aims to develop answers to these questions. I argue that the early development of Quine's naturalism goes hand in hand with his gradual adoption of an ever broadening holism, that his arguments against traditional conceptions of philosophy crucially depend on holistic presuppositions, and that the close relation between holism and naturalism in Quine's philosophy is responsible for some of the main problems contemporary naturalists identify in his work.[22]

1.3 READING QUINE IN CONTEXT

Only thirty years ago analytic philosophy's self-image was still predominantly ahistorical. Analytic philosophers thought of themselves primarily as seekers of truth, not of historical understanding. That is, they were largely committed to the idea of an eternal, theoretically neutral framework for philosophical inquiry—unaffected by context, free of presupposition.[23]

22 The problems I am referring to are the problems which have led many present-day naturalists to develop what they call 'pluralistic', 'liberal', or 'open-minded' naturalism. See Putnam (1981), Strawson (1983), Haack (1993a), Stroud (1996), Almeder (1998), and Maddy (1997, 2007) as well as the essays collected in De Caro and Macarthur (2004b, 2010).

23 See the introduction to Sluga's (1980, 2) book on Frege: "From its very beginning, the [analytic] tradition has been oriented toward an abstracted, formal account of language and meaning, and not toward the comprehending of concrete historical processes"; as well as the preface to Hylton's (1990, vii) book on the early Russell: "Analytic philosophy has largely rejected historical modes of understanding. [...] [A]nalytic philosophy seems to think of

To be sure, analytic philosophers did not neglect their intellectual predecessors: many interesting analytic studies have been written about a wide range of historical figures. Still in engaging with their philosophical forerunners, they primarily treated them as contemporaries, ignoring conceptual and contextual differences. Analytic philosophers, in other words, have been prone to rationally reconstruct their predecessors' views in contemporary terms, such that their theories could be evaluated in terms of "philosophical truth and falsehood".[24]

Analytic philosophy's lack of concern with the historical mode of understanding is not surprising however. For there seems to be a direct connection between these views on historiography and the anti-psychologism discussed in section 1.1 above. Since virtually all analytic philosophers were interested only in logical, not in psychological relations among propositions in their ordinary work, it should not be very surprising that they were also inclined to dismiss the relevance of both psychological and historical contexts in writing about their predecessors.[25]

Today the situation is entirely different. In the late eighties and early nineties, analytic philosophy witnessed what some have called a 'historical turn'. History of analytic philosophy is now widely viewed as an important field of study, comprising a relatively large community of researchers, as is evinced

itself as taking place within a single timeless moment". For a somewhat more distanced assessment of analytic philosophy's ahistoricism, see Peijnenburg (2000b), Glock (2008a), and Reck (2013a).

24 The phrase is Russell's. In the introduction to his book on Leibniz (1900, xx), Russell argues that "[p]hilosophical truth and falsehood [...] rather than historical fact, are what primarily demand our attention". Other often mentioned examples of ahistoricist works in the history of analytic philosophy are Strawson's (1966) reconstruction of Kant, Bennett's (1971) work on Locke, Berkeley, and Hume, and Kripke's (1982) interpretation of the later Wittgenstein. See, for example, Watson (1993) and Beaney (2013a, 59).

25 This link between anti-psychologism and ahistoricism is explicitly made in Beaney (2013a, 37).

by the ever increasing stream of new monographs, papers and collections.[26]

Whether there is a connection between the historical and the naturalistic turn is a matter of speculation and makes up an interesting subject for a different study.[27] Quine, in any case, did *not* combine his naturalism with a strong historical sensitivity. Although Quine includes history in his notion of 'science' (RTE, 1997a, 255), thereby suggesting that philosophy is also continuous with history, his own historical work has been criticized.[28]

As time passes, so do the frontiers of history. Where early historians of analytic philosophy were mainly interested in the nineteenth and the first half of the twentieth century,[29] today there is a growing historical interest also in philosophers who, like Quine, were largely active after the Second World War.[30] In Quine's case, in particular, such a historical approach is much greatly needed. For there is a general consensus among contem-

26 For an overview of some of the work, see Floyd (2009) as well as the essays collected in Floyd and Shieh (2001), Reck (2013b), and Beaney (2013b).

27 On the one hand, it seems that in rejecting the sharp distinction between the logical and the psychological, naturalists create philosophical space for a more historically informed philosophy. Yet on the other hand, the more philosophers come to think of their inquiries as scientific in the sense of 'natural science', the more they will be inclined to dismiss the relevance of the work of their predecessors. For some diverging opinions on the issue, see Taylor (1984), Rorty (1984), Hylton (1990, 2-7), and, more recently, Williamson (2014, §3).

28 See, for example, Friedman (1987, 1992) and Richardson (1990, 1992, 1998), who strongly dismiss Quine's interpretation of Carnap's (1928a) *Aufbau*. Notorious, in this respect, is Quine's quip that there are two sorts of people interested in philosophy: "those interested in philosophy and those interested in the history of philosophy". See MacIntyre (1984, 39-40).

29 Indeed, Floyd, in her overview, speaks about "the history of *early* analytic philosophy" as a field of study (2009, 157, my emphasis).

30 See Hylton (2001, 2002), Decock (2002c, 2004), Mancosu (2005, 2008), Ben-Menahem (2005, 2006), Isaac (2005, 2011), Ebbs (2011a, 2014), Frost-Arnold (2011, 2013), R. Sinclair (2012), Murphey (2012), and Lugg (2012). With respect to naturalism in general, little historical work has been done, as has also been noted, in a somewhat different context, by Richardson (1997).

porary Quine-scholars that, despite the large body of work on his philosophy, his work has been little understood.[31] Not only is Quine's work difficult to interpret because of its comprehensive character,[32] subtle shifts in his philosophy throughout his seventy-year long (!) academic career also require that one reads him in *historical* context.

It is precisely this that I aim to do in the present study. In examining the relation between naturalism and holism in Quine's philosophy, I focus both on how his views systematically hang together, and on how his choices, theories, and arguments are influenced by conceptual and historical contingencies. In doing so, I hope to have found a balance between historical and systematic concerns and thereby to contribute to the developing field of Quine studies as well as the historical turn in analytic philosophy in general.

1.4 PLAN

This dissertation is structured as follows. The first part offers a novel interpretation of Quine's arguments for naturalizing epistemology (chapter 2) and metaphysics (chapter 3) and it provides a historical reconstruction of his early development (chapter 4). Together, these chapters show how Quine's early naturalism crucially relies on his holism. The second part turns to the interplay between naturalism and holism in later stages of Quine's career. It shows how Quine softened his tone by slightly reconfiguring his views about logic and science, it explicates the holistic picture of inquiry underlying Quine's naturalism (chapter 5), and it shows that Quine can maintain his

31 See Kemp (2006, ix), Gregory (2008, 1), and Becker (2013, ix).

32 See Peijnenburg (2000a) and Hylton (2007, 1): "Many commentators have not sufficiently appreciated the extent to which his views hang together to form a coherent whole [...] anyone who approaches Quine's work primarily interested in one [topic] [...] is likely to miss the larger Quinean picture".

views in the face of the sustained criticisms from contempary naturalists who are sceptical about his holism (chapter 6).

In chapter 2, I start out with the *locus classicus* of Quine's naturalism in epistemology, his paper "Epistemology Naturalized" (1969a). On the basis of the argument in this paper, Quine's rejection of traditional epistemology (or 'first philosophy') is often claimed to be based on an argument from despair. According to this standard conception, Quine rejects first philosophy because all attempts to reconstruct our scientific theories in terms of sense experience have failed. I show that this picture is historically inaccurate and that Quine's argument against traditional epistemology is considerably stronger than this received view suggests. For Quine the first philosopher's quest for foundations is inherently incoherent; the very idea of a self-sufficient sense datum language it presupposes is without sense; there is no science-independent perspective from which to validate science. I argue that Quine's stronger argument relies on his holism, and that a great deal of the confusion surrounding Quine's argument is prompted by certain phrases in "Epistemology Naturalized". Scrutinizing Quine's work both before and after the latter paper provides a better key to understanding his naturalistic views about the epistemological relation between theory and evidence.

After this focus on Quine's argument against traditional epistemology, chapter 3 turns to Quine's position vis-à-vis traditional metaphysics. *Prima facie*, Quine's attitude toward metaphysics seems to differ from his attitude toward epistemology. For it is often claimed that Quine *saves* rather than dismisses metaphysics in arguing that ontological questions are "on a par with questions of natural science" (CVO, 1951a, 211). Where Carnap rejects metaphysical existence claims as meaningless, Quine is taken to restore their intelligibility by dismantling the former's internal-external distinction. In the chapter I argue that this popular view is incorrect and that Quine, like Car-

nap, rejects traditional metaphysics. I argue that a historically more accurate perspective on the Carnap-Quine debate should distinguish between two separate internal-external distinctions, only one of which is dismissed by Quine. In support of my interpretation I show that Quine, from the earliest stages of his career, defends a view about metaphysics that is in many respects similar to Carnap's and that the later Quine, in theorizing about the nature of both truth and reference, appeals to an internal-external distinction himself; a distinction moreover which shows that Quine's arguments against traditional epistemology and metaphysics are cut from the same cloth.

After this reconstruction of Quine's rejection of transcendental perspectives in epistemology and metaphysics, chapter 4 deals with the question of how Quine *developed* his naturalism. For even though Quine has always been a science-minded philosopher, he did not adopt a fully naturalistic perspective until the early 1950s. In this chapter I reconstruct the genesis of Quine's ideas on the relation between science and philosophy by examining his development in the first decades of his career. After identifying three commitments underlying his naturalism—viz. empiricism, holism, and realism—I trace the sources of these commitments to three distinct phases in Quine's early development, showing how his early empiricism gradually evolved into the naturalistic position that was to have such an tremendous impact on post-war analytic philosophy. In particular I show how Quine's adoption of a wide-scoped holism in the late 1940s was crucial to his development, thereby providing further evidence for the strong relation between Quinean naturalism and holism.

The first part of this dissertation, in short, shows how Quine's holism plays a crucial role in the early development of his naturalism as well as in his arguments for this position. In chapter 5, I zoom in on the question of how we are to understand Quine's holism. A great variety of holisms have been ascribed to Quine

in the literature, all of them to some extent controversial. In the chapter, however, I argue (1) that at the core of Quine's holism is a relatively innocent observation about the logic of theory testing and (2) that even Quine's ideas about the scope of holism are not as radical as they often appear. Furthermore, I reconstruct some developments in Quine's position in later stages of his career, showing how he slightly changed his views about the breadth of holism, the analytic-synthetic distinction, and the nature of logical truth and inference.

In chapter 6, finally, I discuss and evaluate two arguments which aim to show that there exists a fundamental tension between Quine's holism and his naturalism. First, I discuss Penelope Maddy's argument that Quine's naturalism is *too weak*. A true naturalist, Maddy argues, should take scientific practices at face value, not evaluate them in terms of their contribution to science as a whole. Against Maddy, I argue that Quine *can* accommodate what scientists are doing, thereby maintaining a naturalistic perspective, without giving up on his holism. Secondly, I discuss Susan Haack's argument that Quine's naturalism is *too strong*. According to Haack, Quine unconsciously vacillates between two notion of 'science', something which pushes him into the direction of an implausibly strong scientism. Against Haack, I argue that Quine's naturalism is more moderate than it might first appear and should not be interpreted as scientistic.

This study, in sum, is concerned with a historical and systematic investigation of naturalism as it was developed by Quine, the perspective on the relation between science and philosophy that has played such an important role in the contemporary naturalistic turn. In the conclusion I take up the question as to how my findings shed light on the issues that have been introduced in this first chapter: the interplay between holism and naturalism in Quine's philosophy and the presuppositions underlying the contemporary naturalistic turn.

Part I

IMMANENT AND TRANSCENDENT